The Portfolio Connection

Newsletter

January/February, 1993 Vol 1 Issue No. 6

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All Set For Another Great Year!

Sorry - Late Again.....

Sorry the newsletter is a little late again but we've had our hands full with all the new programs and Portfolio accessories on the horizon. However, with all this activity on the Portfolio front, 1993 looks set to be a good year for Portfolio users!

Subscriptions Growing Steadily

Our decision to make the Newsletter subscription only has met with a very positive response. After an intial influx, subs are still continuing to come in at a steady pace which is very gratifying for us here at *The Portfolio Connection*. Over the coming issues we shall endeavour to repay your support by continuing to supply high quality news, reviews, hints, tips and offers for the Portfolio.

Set Prices Reduced for Subscribers

As our first special offer to subscribers, we are reducing our standard set prices from £5 to £4.75 for a limited period. The offer will apply to all standard sets ordered up to the first week of April, 1993 and the usual 'order four sets and get one free' offer will still apply.

Big Prize Competition Results!

Are you the lucky winner of the big prize BSE I/O interface in our lucky number competition? If not you may still have won the second or third prize and remember, you must claim your prize so turn to page (9) now!

New Catalogue Still Delayed

Unfortunately, the new catalogue is still not ready - we will let you know as soon as it is. In the meantime, if you wish to obtain an update of the existing catalogue then send a C5 or A4 size SAE with two 18p stamps to *The Portfolio Connection* at our usual address.

German Translation Wanted

If you would be interested in translating some German program document files in exchange for copies of the programs concerned, then please contact us here at *The Portfolio Connection* on (0491) 36880 as soon as possible - thanks.

Fax problems hopefully solved...

Our fax switch appears to be behaving itself better now but if you have trouble faxing us then please let us know.

New This Issue:

Three new sets this issue:

New Sets

AP4 - Applications 4

- **Ukhol93.dry** - this diary file contains details of all 1993 UK holidays and special days
- **93hldy.dry** - the US equivalent of the above diary file
- **Distance.com & distnc.com** - these two programs allow you to compute the distance between two positions of latitude & longitude
- **SDB** - a 'Simple Database System'. This would appear to be one of the more promising PD databases for use on the Portfolio. However, it may be simple if you have knowledge of database languages but <u>not</u> for the casual user! 'C' source code is also included.

The following address book files are also included in the set:

- **ASCII** - shows ASCII characters
- **ATT** - gives ATT dialling codes from different parts of the world
- **DOS** - the DIP DOS commands are explained with examples. A great file for Beginners!
- **Recipes** - two recipe databases

Top Ten Changes

You will notice that there are a few new faces in the Top Ten Sets this issue. Previously, we have always based the Top Ten on the total number of sets sold. This has meant though that recently introduced sets, although they may be selling well, do not have a chance to catch up with the old favourites that have been around for a long time and therefore do not appear in the chart. To rectify this, we are now basing the Top Ten on monthly rather than total sales which will hopefully giver a better idea of the sets which are currently popular.

Top Ten Sets

❶	⇔	**Games 1**
❷	⇧	**Utilities 1**
❸	⇔	**PBasic 1**
❹	⇧	**Utilities 2**
❺	⇧	**Portfolio Demo**
	⇧	**Games 2**
	⇩	**Wordprocessing 1**
❽	⇧	**Applications 3**
	⇧	**Coms 1**
❿	⇩	**PC Accessories 1**

PC3 - PC Accessories 3

- **Foliobak** - Great Portfolio to PC back-up utility. Needs FT.com and parallel interface

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NEWS

Portfolio Prices Slashed - £99.95!*

As we go to print, we are able to bring you the exciting news that we have managed to achieve a substantial reduction in the price of new Portfolios. The new price for a brand new Portfolio is now, wait for it, just **£99.95** *including VAT & P+P*! (£79.95 excluding VAT & P+P). This represents an incredible saving of £38 over our previous discounted price of £137.95 including VAT & P+P and you will notice that the ex-vat price of £79.95 is less than £20 over DIP's minimum repair cost.

At this incredible price it must surely be worth considering the purchase of a second machine as a spare or even the luxury of one for home and one for the office. Please note that this offer is not unlimited although at present we have access to a reasonably large stock.

If you've been considering the purchase of a Portfolio then we guess that there just won't be a better time to buy, so get your cheque off to us today!.

**stated price includes VAT & P+P*

Bargain Price Memory Cards!

We have managed to obtain a *very limited* quantity of special purchase 64k Portfolio Memory Cards. These cards are brand new and we are offering them to subscribers at the unbeatable price of £52.50 per card including VAT and P+P - that's an incredible saving of over £35 on the recommended retail! It is unlikely that we will be able to repeat an offer like this and orders will be dealt with on a strictly 'first come, first serve' basis so get your cheque off to us today! Delivery will be one to two weeks and if you are unlucky, your cheque will be returned. In the meantime, *The Portfolio Connection* will continue working to make storage cards available to Portfolio users at affordable prices.

Card Batteries Available - only £1.99!

Following a number of requests from our customers, we have begun to stock the CR2016 lithium batteries used in Portfolio memory cards. We are offering these at just £1.99 including VAT & P+P, which represents a considerable saving over the £2.50 to £3.50 you will usually be charged at High Street retailers. We are also looking into supplying the standard AA alkaline batteries used by the Portfolio at a bargain price - we'll keep you informed!

PBasic 5.0 Now Available

Version 5.0 of PBasic, the excellent BASIC interpreter for the Portfolio written by B J Gleason of The American University, has arrived. See the New Additions column and the PBasic Column for more details.

Portfolio Programs from Down-Under

An Australian company, Compax, provide a number of useful programs for the Portfolio including:

- **Slave Plus** - a terminal program
- **Master PC** - Slave companion for the PC
- **Office Power** - sales tracking software and more
- **Pro-Spell** - spelling checker
- **Port-Graph** - graph generator
- **PDB** - database program
- **Compax Utilities** - includes battery monitor, disk doctor, 60x10 file viewer, card unerase etc
- **Pretty Printer** - embed print codes in text files

The programs are available on ROM and look very useful. The drawback is the price - most are $149 (Australian dollars) which works out at around £75 and this is before the addition of VAT, import charges etc. Office Power is even more expensive at $295 ie about £150. However, they may be worth it if they provide a solution you are looking for. If you are interested in any of these programs, then contact us on (0491) 36880.

Re:Port Newsletter

The current issue of Re:Port contains, among others, reviews of the BSE interfaces and Don Thomas' Address Book program for the PC, along with an article on Portfolio error messages. This issue's programs include a concentration game, programs to make your own alarm sounds and a program to set the screen brightness. You can buy a year's subscription (6 bimonthly issues) directly from America for $55 but to save the hassle involved, we have arranged with David to distribute Re:Port here in Britain. One year's subscription costs just £40 including P+P - contact *The Portfolio Connection* for details. Please note that prices may be subject to change without notice due to fluctuations in the exchange rate.

Pocket PC Companion Sold Out!

The half-price offer on Peter Baron's "Atari Portfolio/DIP Pocket PC Companion" in the last issue of *The Portfolio Connection* Newsletter proved to be extremely popular and we have now completely sold out. Dr Baron has tried unsuccessfully to locate some more copies for us but will let us know if any more turn up. Sorry to all of you who were unlucky and had to make do with a refund - you can be sure you will get first refusal if any more copies do turn up! Peter Baron specialises in supplying Computing and Scientific books and we have some copies of his catalogues here at *The Portfolio Connection*. If you would like a copy, send us a C5 size SAE. If there is enough interest, Dr Baron has offered to write and supply a booklet for us on aspects of Portfolio use, for example an introduction to using DOS commands, so if you would be interested in such a booklet, please write or phone to let us know.

Oops - No trade-ins!.....

In the last issue of *The Portfolio Connection* Newsletter we said we believed that Atari UK had a 'new for old' trade-in policy for broken Portfolios. We have since learned that, although this is the case in the USA, it is not a service provided by Atari UK.

.....But Portfolio Repairs Available

We have managed to locate somebody willing to do Portfolio repairs for reasonable prices so, if you are having problems, contact us here at *The Portfolio Connection.*

more next issue....

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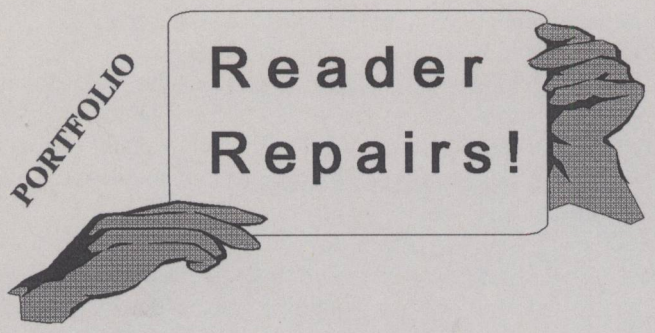

The letter from Alan Chin last month brought a fair response from readers who had either had the same problem with the ribbon cable on their Portfolio or had useful tips and ideas on what to do about it. The most comprehensive contribution came from Tim Kendal who, having undertaken the daunting task to replace the cable, was kind enough to set what he did down on paper for the benefit of other Portfolio users. As a result, the Reader Review space for this issue has been turned into a 'Reader Repair' column based around Tim's guide-lines.

Please bear in mind that undertaking such a repair job such as this requires a great deal of practical skill and dexterity and will also invalidate any warranty remaining on your Portfolio. On the other hand, it could save you sixty quid!

REPLACING THE SCREEN RIBBON CABLE ON THE PORTFOLIO

My Port suddenly lost its screen display - completely blank! By chance I discovered that if I only opened it about half an inch, and pressed a key to switch on, the display was working. I therefore decided that the ribbon cable was at fault, and remembered the note in The Portfolio Connection newsletter about this weak link.

Peter Bennett very kindly supplied instructions by Bruce Coleman explaining how to open the screen part of the machine (see page 5). These instructions are a great help, though on my machine the PCB is screwed to part of the case, so there is no danger of losing the speaker.

You can clearly see the ribbon cable where it leaves the screen half of the machine. You will also see that it is a very thin cable, and I don't know where you can buy one! Even worse, it gets narrower as it leaves the screen, and I'm sure you can't buy one like that anywhere. Nevertheless, perseverance was rewarded, so if you want to know how I restored the machine to life read on! The job is fiddly and took me several hours, but was successful in the end.

Tools

You will need:

- cross-headed screwdriver
- modelling knife
- fine soldering iron
- multimeter, or other method of testing continuity.
- fine flat blade screwdriver, to assist with fine soldering

The New Cable

Buy a length of standard 20 way ribbon cable (25 way RS232 flat cable will do as you can remove 5 ways very easily), from Tandy or Maplin etc. You only need about 3 or 4 inches, but you will probably have to buy more than this. (*NB. See also the ribbon cable tip at the end of this article - Editor*).

The Method

1. Remove batteries, then open the screen as described by Bruce Coleman (see page 5).

2. Use the knife to cut the ribbon cable as close to the connector as possible (although this looks like a push in connector, I couldn't get it out, and I think the cable is soldered in).

3. Bend up each of the 20 pins on top of the connector, keeping them all vertical, and tin them by applying a very small amount of solder to each. Make sure there are no bridges!

4. Turn the whole machine over, and remove the two rubber strips (one long, one short) at the back which stops it slipping. they are glued in and just pull out.

5. Remove the 2 screws revealed, and also 2 more screws, one at each end of the expansion socket.

6. Remove the bottom of the case. There are plastic clips at each end of the front edge, so ease this edge away from the main body with a screwdriver.

7. Remove the part of the battery compartment that covers the ribbon cable. This is not fixed in - it comes out easily with a little gentle persuasion!

8. I separated the base from the screen by undoing the 2 silver screws now revealed in the battery compartment. The hinge construction is ingenious, and it might be worth noting how it goes together, to save time puzzling later! It might be possible to complete the job without separating the two halves of the machine, but it makes life easier.

9. Prise apart the tubular two piece plastic moulding through which the ribbon passes at the hinge.

10. Gently pull the top of the connector where the ribbon cable is attached to the main PCB, towards you horizontally, and then raise to 45 degrees. This releases the end of the cable. The moving part of this connector can be taken out if you wish, but be careful not to snap the plastic as you ease it back!

Cut your new ribbon cable to about a third to half an inch longer than the total length of the old one. This is so that, when fitted, the new cable will protrude slightly from the back of the machine. This is not quite as neat as the original, but I think there is less movement in each part of the cable, and thus more chance of a long life.

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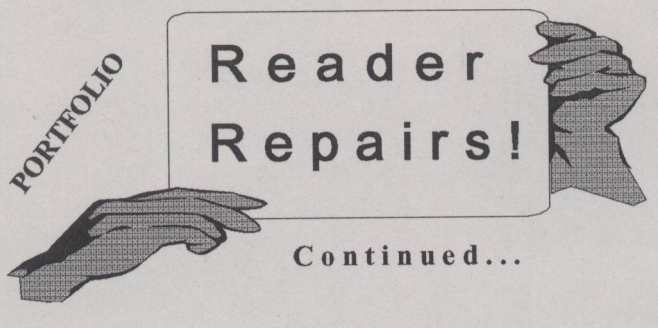

Continued...

11. Cut the original cable about half way, or a little less, between the connector end, and the point where the grey sticky tape has been wrapped round it. You are going to re-use the end section of the cable, but do not need the rest, except for practice - see below. We are assuming of course that the break in your cable is where the cable is bent every time you open the machine! I don't think it is possible to test this, but it seems highly likely.

12. Use the discarded section of ribbon cable to practice the next bit! You have to scrape off the plastic covering the copper conductors on one side of the cable. This requires great patience and care, as the plastic is tough, and the copper very fragile and easily broken. It must not be cut or broken! Because the new cable is wider than the existing one, you must scrape in two rows across the old cable, exposing the copper in alternate tracks in each row. If you expose all the tracks in one row, you will not be able to solder the new cable to the end section of the old one without some short circuits!

13. Tin each exposed piece of copper track with a very small amount of solder.

14. Prepare one end of the new cable by separating the wires for about an inch, then shortening alternate wires so that when laid on the end section of the old cable, the ends match up with your tinning. Bare the ends for a very short distance - a tenth of an inch is plenty.

15. Tin the ends of all wires, again being very sparing with the solder. We must avoid bridges! Do make sure that there are no stray strands of wire about - they must be all inside the tinning.

16. Taking your time, and using the hot soldering iron but no more solder, connect the shorter wires in the new cable to the exposed copper track nearest or at the non connector end of the old cable. Then connect the longer wires to the other row of exposed copper. Make sure all wires are firm, and there are no bridges.

Now prepare the other end of the new cable. All wires are the same length here. Again, only a very short length of wire should be exposed. This must be tinned and checked for stray wires and bridges. Test the complete cable for continuity of each wire from the original connector to the newly bared wires at the other end. Try to satisfy yourself that there are no short circuits between adjoining wires.

Offer up the screen end of your cable to the screen, passing it through the slot in the lid. MAKE SURE IT IS THE RIGHT WAY UP! You can only check this by working out which way up the connector to the main PCB goes - the plated end of the old cable end is nearest the PCB, the white backing material being away from the PCB. When I was fitting my cable to the screen-end connector, the white backing at the other end of the cable was visible, the plated side being next to the work-surface. But double check this for yourself.

You have already tinned both the screen PCB connectors and the wires in your new cable, so all you have to do now is apply heat but no more solder to make the 20 connections. Take the greatest care, and be patient. You need good eyesight!

Reassemble the screen by clipping the two parts together, but do not fit the screws yet. Using the modelling knife, slit the cable near the old section into two parts so that one can overlap the other where the cable has to pass through the slot in the case on its way through the battery compartment to the main PCB. You could use a saw or file to enlarge this slot, but it is not necessary. I think it a good idea to have some friction here by having the cable a tight fit, so that there is less chance of movement when in use damaging the original part of the new cable. As already mentioned, the copper tracks are very weak, and you must not allow them to be pulled.

Connect the cable to the main PCB, and, without refitting the base, put in the batteries. Although it is awkward to hold the batteries in place and see the screen at the same time, it is worth it to see if you have been successful. If you do not now see anything on the screen, then I can only suggest you check everything carefully for bridges or, more likely perhaps, an unsound joint.

Putting as little pressure on the very fragile copper track in the original cable and your carefully soldered connections as possible, adjust the new cable so that it fits snugly round the battery compartments so as to allow batteries to be inserted when the case is re-assembled.

Re-assemble the whole machine, leaving out both the piece of plastic which separated the ribbon cable from the batteries, and also the tubular two-piece moulding where the cable passes through the hinge. The new cable is too thick for these. This makes inserting batteries slightly more tricky - you will by now know that care is needed not to force the cable. Try holding the machine right way up as you insert the batteries. That way they will clear the cable more easily.

Best of luck!

Tim Kendal

The Ribbon Cable

For those of you who wish to attempt a ribbon cable replacement, here is a useful tip from one of our readers, Kevin Swaine:

"I enclose a lead that I made when the flexiboard on my Portfolio went faulty. It is made from 20 strands of pick-up arm cable (the sort used in old turntables for playing records), and though mine has only been going for a month, I have had no problems.

What you have to do is lay 20 strands of wire onto two

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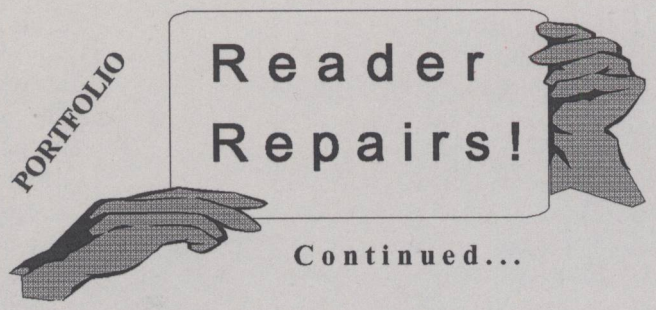

strips of insulating tape, cut to length, and solder onto the boards of the Portfolio. Care must be taken not to short out solder connections as well as make good joints. In the lead I have sent you, I also ran some UHU glue along the lead to make it stronger. I have also used more than one colour as this makes it easier to work out which lead you are connecting to where. Hope above is of use."

Kevin Swaine

Openup.txt

On page 3, Tim Kendal made reference to instructions by Bruce Coleman for opening up the screen of the Portfolio. Bruce Coleman is an American Portfolio user who wrote down some notes on opening the screen of the Portfolio and uploaded it, as the file 'openup.txt', to Compuserve, the on-line computer information service.

We attempted to contact Bruce Coleman to obtain his permission to reprint openup.txt as part of this article, but had been unable to do so by the time we went to print. We cannot therefore bring you the text in this issue but hope to do so in a forthcoming issue. In the meantime, if you send us a 24p stamp we will send you a copy of the file.

Wanted: Your Opinions

If you have any Portfolio-related products which you really like or dislike, then why not write a short review and send it to us? The review need not be long and you can send it to us preferably as a text file on a 5¼" or 3½" disk or otherwise as a printout.

Alternatively, as with this issue's article, you may wish to send us an article on a particular aspect of Portfolio use which you feel will be helpful to other Portfolio users.

Each review or article published will receive a £5 voucher towards any goods available from *The Portfolio Connection*. Send your contribution to:

Portfolio Reader Reviews
The Portfolio Connection
Bucklands Cottage
Wallingford Road
Cholsey
Oxon OX10 9HB

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Worksheet Review

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In the last issue we took a look at BALANCE.WKS, a worksheet from Set AP1 to help with balancing your accounts. This issue we take a look at the second worksheet mentioned last issue, RECACC.WKS from Set AP3.

RECACC.WKS

Whereas balance.wks enabled you to keep an ongoing record of incoming and outgoing amounts, this relatively simple spreadsheet is designed to enable you to reconcile your bank statement balance with your own records. Thus it can be used in conjunction with balance.wks. This spreadsheet was written by Ted Baynes, who has been a banker for 25 years.

As he is an American banker, the currency cells of the spreadsheet are set for American dollars and need to be changed to pounds sterling. To do this, bring up the main menu from within the spreadsheet by pressing Fn+1 or the red Atari symbol key. Press D for defaults and then choose C for currency. Enter the '£' sign by pressing Alt+£ keys and then press enter. If you've done it correctly, all the '$' symbols on the spreadsheet will have changed to '£'.

So, on to the spreadsheet itself. Whereas balance.wks uses a number of columns and tends to work from right to left, recacc.wks uses just columns B and E for data input and calculation and works from top to bottom. It is also divided into a number of vertical sections, making it easy to follow on the Portfolio's small screen width.

Starting from the top, enter the date into cell B8 (or A8 if you prefer) and the balance shown on your bank statement into cell E10. The section below this allows you to enter up to two deposits in transit in cells B15 and B16, which are totalled for you in cell E16.

The next section, Outstanding Cheques, allows you to enter up to ten cheques which you have written, but have not yet appeared on your statement. Cheque numbers are entered in column A and the corresponding amount in column B. These cheques are totalled for you in cell E30 and then offset with deposits in transit and your statement balance to give an adjusted balance in cell E32. It is probably worth noting that all of this is a lot more straightforward to do than it is to explain!

Next you scroll down to cell E34 and enter your ending chequebook balance. Now, if all is well, row 46 of the spreadsheet, the 'Unreconciled Difference' row, should show a value of £0.00 in cell E46 and your balance is reconciled. If not, you need to go back and check your accounts for errors. The spreadsheet has another section for you to enter the errors as you find them. These are entered into the relevant cells in column E as positive numbers for credits and negative numbers for debits. Eventually, the 'Unreconciled Difference' cell will read £0.00 and your account is reconciled. The documentation that comes with recacc.wks gives some useful advice on tracking down errors.

Recacc.wks is well laid out and provides for a convenient method of balancing your own accounts with your bank statement. Some may find it over-simple but for those of us who get confused when there is a discrepancy in the accounts, it is a useful aid to tracking errors.

The PBasic Column

This issue sees the release of PBasic 5.0 and we shall be taking a closer look at it here in the Pbasic column. At first sight nothing much seems to have changed, the size of the file is much the same at 44k and there are no major new commands or features. A bug when there was insufficient memory to run a program has now been fixed.

There is one significant change however, which is all important to a lot of you coms programmers out there and this is that serial communications are now interrupt driven.

Up until now, serial communications were handled by the ROM BIOS in the Portfolio and it was not practical to set baud rates higher than 300 baud. It was possible to set higher baud rates for say typing where there was a significant delay, in computer terms, between the transmission of each character but if a continuous stream of data was sent at higher baud rates, then characters would be lost.

Now that Pbasic serial communications are interrupt driven, it should be possible to handle a continuous stream of data at higher speeds, without losing information.

Programming the Serial Port

In Pbasic, serial programming uses four commands:

- COMSET
- COMSTAT
- COMIN
- COMOUT

Comset

Comset is used to configure the serial port and uses a value based on an 8 bit number. The value is arrived at as follows:

7 6 5	4 3	2	1 0 (Bit No.)
Baud Rate	Parity	Stop Bits	Word Length
0 0 0 = 110	X 0 = none	0 = 1 bits	1 0 = 7 bits
0 0 1 = 150	0 1 = odd	1 = 2 bits	1 1 = 8 bits
0 1 0 = 300	1 1 = even		
0 1 1 = 600			
1 0 0 = 1200			
1 0 1 = 2400			
1 1 0 = 4800			
1 1 1 = 9600			

So, to set the port to, say, 9600,N,8,1 we would use the following:

```
111  00 0  11
(9600  N  1  8)
```

ie the binary number 11111010 which is E3 hexadecimal or 227 decimal. Therefore we would use the command:

```
comset=227        OR      comset=&hE3
```

to set the serial port.

Comstat

In PBasic 4.9x, Comstat returned a 16 bit value by which the status of the serial port could be determined. The significance of each bit when set to 1 was as follows:

Bit	Significance (if set)	Mask
	Port Status	
15	timed-out	&h8000
14	transmit shift register empty	&h4000
13	transmit holding register empty	&h2000
12	break detected	&h1000
11	framing error detected	&h800
10	parity error detected	&h400
9	overrun error detected	&h200
8	receive data ready	&h100
	Modem Status	
7	receive line signal detect	&h80
6	ring indicator	&h40
5	data-set-ready	&h20
4	clear-to-send	&h10
3	change in receive line signal detect	&h08
2	trailing edge ring indicator	&h04
1	change in data-set-ready status	&h02
0	change in clear-to-send status	&h01

By using the 'AND' operator, the status of each bit could be determined. The logical operator 'AND' could be used to compare two bits and will only return TRUE (or 1) if both bits are set to one (see below).

X	Y	Result
T	T	= T
T	F	= F
F	T	= F
F	F	= F

So, from the comstat table above, if we wished to check 'receive data ready' we would need to check bit 8 of the value returned by comstat to see if it was 1. If this were the case then the value returned by comstat would have a 1 at bit 8 thus:

```
0000000100000000
```

ie 100 hexadecimal or 256 decimal (of course other bits may also be set). However if, using this number as a mask, we AND it with the comstat value, then it will only return 1 (or TRUE) if bit 8 of the comstat value is set to one. This will be the case regardless of the settings of the other bits, as all the other bits will have a 0 included in the AND operation. See examples below:

a) Where data is waiting:

```
      0000000110001000      :example comstat value
AND   0000000100000000      :mask
      0000000100000000      :Result is TRUE
```

b) Where data is not waiting:

```
      0010000000010001      :example comstat value
AND   0000000100000000      :mask
      0000000000000000      :Result is FALSE
```

So, to check if data is waiting at the serial port we can use the command:

If (comstat AND &h100)<>0 then....<further commands>
(Note:&h100 means 100 hexadecimal).

/Continued on Page 7

Other aspects of serial port status can be checked using the same method. To help, the hex mask values needed to check each of the status bits are included the comstat table on the previous page. The code for these operations can be seen in the 'Terminal.bas (4.9)' listing below.

If this seems complicated, then you'll like PBasic 5.0. The comstat function in PBasic 5.0 returns the input buffer of the serial port. If there are no characters in the buffer then comstat returns FALSE. This makes it much easier to program - see the 'Terminal.bas (5.0)' listing below. I don't know at this stage whether it is still possible to obtain other information about serial port status - if it is then I'll report on this in a future PBasic Column.

Comin

Comin is used to read a character from the serial port and will return a number which is the ASCII value of the character. In the example program terminal.bas included with PBasic and listed below, line 1 contains the code to read characters from the serial port and display them to the screen.

Comout

In the same way that comin is used to receive data from the serial port, comout is used to transmit characters. Once again, the value of comout needs to be a number which is the ASCII value of the character to send. This can easily be obtained using the ASC() function. See the terminal.bas listing for example code using comout.

TERMINAL.BAS (4.9)

```
' A simple half-duplex terminal program
' Remove line number 2 and 4 if host sends LF
' Remove line number 3 for full-duplex
'
comset=&h9a  : ' 1200,E71
1 if (comstat and &h100)<>0 then
    a=comin          : ' read character
    print chr$(a);   : ' print it
2   if a=13 then print  : ' new line
  endif
  a$=inkey$          : ' check for keypress
  if a$="" then goto 1    : ' if none, check incoming
  if a$=chr$(27) then 5   : ' ESC key to exit
3 print a$;          : ' Print keyboard char
4 if a$=chr$(13) then print : ' new line
  comout=asc(a$)     : ' send it
  goto 1
5 if isrun then run "MENU" else end
```

TERMINAL.BAS (5.0)

```
' A simple half-duplex terminal program
' Remove line number 2 and 4 if host sends LF
' Remove line number 3 for full-duplex
'
comset=&hfa  : ' 9600,E71
1 if comstat then
    a=comin          : ' read character
    print chr$(a);   : ' print it
2   if a=13 then print  : ' new line
  endif
  a$=inkey$          : ' check for keypress
  if a$="" then goto 1    : ' if none, check incoming
  if a$=chr$(27) then 5   : ' ESC key to exit
3 print a$;          : ' Print keyboard char
4 if a$=chr$(13) then print : ' new line
  comout=asc(a$)     : ' send it
  goto 1
5 if isrun then run "MENU" else end
```

PBasic Manuals

A new bound manual is currently in preparation for PBasic 5.0 which is why they have not been available recently. For those of you who would like a copy, let us know, if you have not already done so, and we will contact you when they are ready.

PBasic (currently version 5.0) is a public domain basic interpreter for the Portfolio, written by B J Gleason of The American University.

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New this Issue

CONTINUED FROM PAGE 1...

PC3 - PC Accessories 3 continued...

- **Dbfread** - this great utility will extract certain fields from dBase compatible files into Portfolio address book format.
- **Adr_Book** - this superb new shareware program from Don Thomas Jr of Artisan Software will enable you to manipulate Portfolio address book files on the PC. Functions include add, search, merge delete etc etc and also allows you to break the 50k Portfolio address size barrier. The Shareware version has the 'save' feature disabled but we have arranged with Don Thomas to become a registration point for the program in the UK. Registration is as low as £9.50 for a single user license - phone for details....

PG6 - ESIE & Miniforth

- **ESIE** - the 'Expert System Inference Engine' will enable you to create expert system applications for the Portfolio. Sample files are included.
- **Miniforth** - a mini version of the FORTH programming language. Works on the Port.

New Additions

PBasic Version 5.0 Update

The main new addition this month is the PBasic version 5.0 update. A minor bug has been rectified and serial communications are now interrupt-driven which basically means you can achieve reliable serial communications at a much higher speed than previously possible.

Set PB1 now contains the updated version of the program but for those of you who already have Set PB1, it is also available as:

Set UP5 - Update 5

That's about it for this issue but we have a whole lot more in the pipeline including Applications, Word-processing, Graphics, Powerbasic and other Programming sets so watch *The Portfolio Connection* Newsletter for details of these new sets as they become available.

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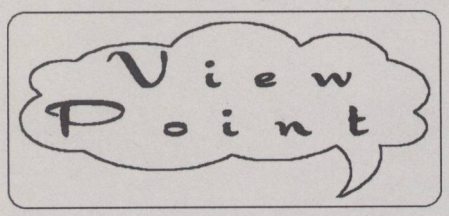

Readers' Letters and Tips

This issue we have information on Portfolio Cases, a keyboard help idea and some worksheet tips.

Following the letter from John S Akers last issue, we managed to find the following message in the Portfolio Forum on Compuserve (the online computer information service). Our thanks go to Fred for allowing us to reprint his message here. It is about both the new Portfolio case available in America from Atari and the Lynx Kit Case:

#: 38022 S17/Community Square [APORTFOL]
18-Dec-92 21:01:47
Sb: New Port Case
Fm: Fred DeCaro III 75130,3077
To: Don Thomas

I received my new Portfolio case today (the one that also holds a peripheral). If you place the Portfolio in the case as shown, then it is only useful for typing if it is placed near the edge of a table, so the other half of the case can hang down off of the table. If you place the Portfolio in the case so that its front edge is aligned with the edge of the case, the other half of the case can sit behind the Portfolio.

Either way, I have found that if you put the three AA batteries in the slots designed for them, the case is very tight, and one needs to use considerable pressure to close it. Without the batteries in place, it is a snap.

If ATARI plans on making more of the cases, I would suggest reversing the pocket layout so that the bottom of the memory cards is closest to the Portfolio, and also reversing the pen-holder and the battery holders. If the pen and batteries were reversed, the batteries would fit on top of Portfolio, instead of behind it. (It's times like these that make me wish I had a scanner, because I would love to be able to send you a drawing to match my description).

On the whole, however I think the case is very useful. My *personal* choice for the Ultimate Portfolio carrying case is actually the super-Lynx carrying case.

This has room for the Port in the spot where the Lynx would usually go, and then there are separate padded compartments for my Hayes Smartmodem, AC adaptor, serial and parallel ports, memory cards galore, and a few manuals. The three plastic-covered cartridge holders up above can each fit 4 4-paks of batteries if you cut off the cardboard part, as well as other little gadgets like memory-card labels, RJ-11 connectors, etc.

I removed the stitching around the LYNX label on the outside of the case (sorry) and used it when I went to England this summer. It's cheaper than the case I just received, has better padding, and has a shoulder strap as well as a handle. I can't recommend it highly enough!

This useful information from Fred de Caro in America leads in quite nicely to a letter we received from Bob Richmond on the subject of cases and which is our 'Tip of the Month' for this issue.....

Tip of the Month

Dear Editor

On the subject of cases, having bought my Portfolio from W.H. Smiths for £99 I did not feel disposed at forking out circa £25 for a case. Instead, a trip to my local luggage store. They had 3 potential options:

1. A "Passport/Travel Document Wallet" marketed by "Go" Travel Products - a well known range of travel accessories sold in most department stores, duty free shops etc. - Item (311) - It takes the Portfolio + card, 3 batteries & the small user guide - £5.20 (and its neat!)

2. Small nylon organiser case A5(ish) & circa 40mm wide - £3.99.

3. Small leather organiser case A5(ish) & circa 40mm wide - £12.50 (my Choice) - takes Portfolio, Interface, 6 batteries & a small lead (at a push) + small user guide.

The "Go" Passport/Travel Doc. Wallet is by far the most attractive option with a neater fit (but the other cases allow more content). It may be a worthwhile addition to your accessory list.

Bob Richmond

..... Thanks for the useful case suggestions - they earn you a free Portfolio Connection set of your choice for our 'Tip of the Month'. If anyone else has any ideas or discoveries about useful cases they would like to share, then contact us at the address below.

Editor

Dear Editor

A couple of items for the newsletter:

Tip 1

In order to remember which calculator function key does what get hold of a "post-it" type notepad. Write the functions on the sticky part of the paper and cut out the strip carefully. You will find that (if you've written small enough) there is room to stick this note on the hinge above 7,8,9 and 0. The soft adhesive used does not appear to affect the plastic of the case and the note is easily removed if required.

Tip 2

The worksheet calculates trigonometrical functions (sin, cos and tan) in radians. If you want to work in degrees use these formulae:-

- Sine of angle in degrees = @SIN(angle in deg*2*@PI/360)
- Angle in degrees = @SIN(sin of angle*360/(2*@PI)

Chris Thompson

....thanks for those useful suggestions Chris. These sort of Portfolio 'tricks' can be really useful - especially those for the spreadsheet. Look out for more next issue....

Editor

Send your letters/tips to:

The Portfolio Connection
Bucklands Cottage
Wallingford Road
Cholsey
Oxon OX10 9HB

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Are you the Winner of a Brand New BSE I/O Interface ✱✱✱ in our Lucky Numbers Competition? ✱✱✱

Well, this is the moment you've all been waiting for - the winning numbers in our Lucky Numbers Competition! Check your number (or numbers) with the winning numbers below to see if you have scooped one of the exciting prizes on offer! So, without further ado, here are the numbers:

1st Prize - Number 189817

2nd Prize - Number 189444

3rd Prize - Number 189244

In case you need reminding, here are the prizes on offer:

1st Prize

A BSE Universal I/O interface with parallel port, serial port and 128k EPROM with File Manager, Xterm2, PBasic and other software. Also included is the chance to upgrade to the 512k RAM version for just £99.95!

2nd Prize

A quality leather Portfolio Carrying Case!

3rd Prize

A year's free subscription to *The Portfolio Connection* Newsletter or a credit note for £7.50!

TO CLAIM YOUR PRIZE:

Simply contact us here at *The Portfolio Connection* by telephone or mail **before 20th March, 1993**. DO NOT send us your lucky number in the first instance! We will then arrange with you to deliver your prize in return for your lucky number.

Remember that you must claim to receive your prize!

If You Have Not Won.....

Hang on to your lucky number(s) as any prizes which have not been claimed by 20th March, 1993, will be put forward into a special subscribers-only draw in the next issue!

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Beginners Column

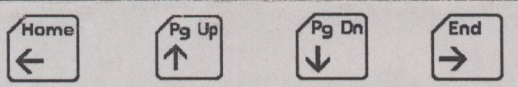
Navigating the Keyboard - Part 2

Last issue we began to look at the keyboard of the Portfolio, starting with what the keys do if pressed by themselves. We had got as far as the row containing the shift keys - one at either end. Also on this row we have some letter keys, as on previous rows, and four character keys (\ , . and /).

Next to the shift key on the right hand side we have the 'del' key. This stands for delete and pressing this key on its own will generally delete whichever character is under the cursor. In some programs it will perform other delete functions, for example, in the DIP File Manager program, pressing the delete key, will delete the file which is marked by the cursor. Fortunately, it double checks before deleting, in case you pressed delete by accident!

So, now we come to the final row of keys at the bottom of the keyboard. Starting from the left hand side we have the special red 'Atari' key, not found on other keyboards. Pressed by itself, it has the same effect as F1 (usually accessed by pressing the blue 'Fn' key followed by the '1' key on the top row of the keyboard). Next we have the blue 'Fn' key, the 'Ctrl' and the 'Alt' keys. Pressed by themselves they have no function and need to be pressed in combination with other keys.

Next we have the space bar, which produces a space! (although it may have other effects in some third party programs). Following the space bar we have the four direction keys which, where they have an effect, generally move the cursor in the direction of the arrow on the keys.



This completes the overview of what the Portfolio keys do when pressed by themselves and we move on now to combination keys.

Combination Keys

As we mentioned last issue, the Portfolio only has 63 keys but by the use of combinations of keys can pretty well emulate the 102 keys on a conventional desktop and do a bit more besides. Combining keys usually involves holding down one key and then pressing another whilst the first key is still being held down. This is usually shown in manuals etc. by placing a '+' sign between the two key names (as in Fn+1 for F1).

Some combination keys are 'sticky', which means you don't have to keep the first key pressed whilst pressing the second (eg the Fn key). This can save you stretching across the keyboard, but, if in doubt, holding both keys down will usually work. The main combination keys are 'Shift', 'Fn', 'Ctrl', 'Alt' and the red 'Atari' key.

One problem with combination keys is that they can be used in many different ways and can vary greatly from program to program. Therefore the guide which will follow in coming issues is not exhaustive but should give you plenty to work with.

That concludes this issue - next issue we take a look at the shift key.....

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Classifieds

- **For Sale - Atari Portfolio**; 64K card; Parallel Interface and Software; AC Adaptor; Manual, Textbook, Complete Guide to Portfolio (Abacus). £175. May split.Phone: David (081) 946-7194 (24 hours).
- **For Sale - Parallel Interface** with Software - 5¼" Disc & cable for PC connection. £25. Phone (0582) 761026.
- **For Sale - Atari Portfolio** £80, as new. Phone John (0276) 685108.
- **For Sale - Memory Expander** Plus £60, PC Card Drive £50. Contact The Portfolio Connection.
- **For Sale - Pocket PC** (Atari Portfolio) £60, Leather Case £10, AC Adaptor £5, 128k Memory Card £75, Pocket Sales Force ROM Software £40, Utilities Card £25, Instant Speller Card £25, PC Application Software £20, Parallel Interface & Software £25, File Transfer Cable £5, Amstrad PPC512 portable computer with double disk drives £200. £490 for the lot or make me an offer. Contact Ken Johnson on (0225) 775360 (Tel & Fax).
- **Wanted** - 2 Atari Portfolios, will pay £60 each. Telephone (0664) 61412

Buyers & Sellers Directory

Some classifieds did not reach the newsletter as we are often phoned by people wanting Portfolio peripherals and, where possible, refer them to those of you who are selling equipment. As a result, we are starting a Buyers & Sellers Directory - contact *The Portfolio Connection* and let us know what you are selling. We will enter this into a directory. Those of you who are after specific Portfolio items can contact us and we will put you in touch with the sellers. Any items not sold by the next Newsletter will go in as classifieds. This should make for a quicker turnover all round so we'll try this scheme for a few months and see how it goes.

The Portfolio Connection Newsletter Classifieds are FREE. Send your advert to :

The Portfolio Connection Newsletter
Bucklands Cottage, Wallingford Rd
Cholsey Oxon OX10 9HB

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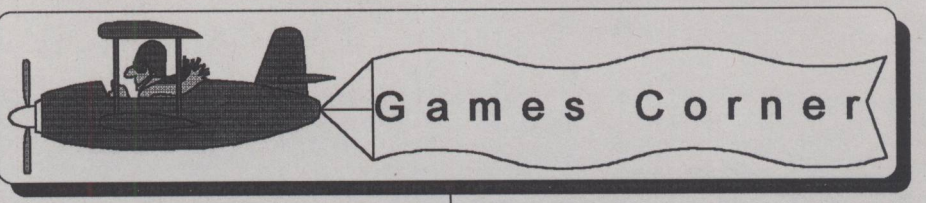
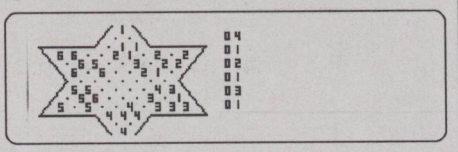


Chinese Chequers

Chch.com (Chinese Chequers) is written by Hugh Satow and is available in Set GM3 - Games 3. The game is played on a board the shape of a six-pointed star and the idea is to get your pieces to the opposite point of the star, jumping over an opponent's pieces if necessary.



The computer battles out a 6-sided game...

The game is for two to six players with the computer being able to play any combination of sides if required. The game can also be played without the computer's intervention although it is hard to imagine six people crowded around the Portfolio screen to play a game!

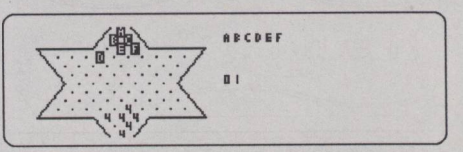
On starting the game, you are asked to enter the number of players (2 to 6). Entering a '0' here will exit the program. If you choose 2 or 3 players you are then asked which sides of the six-pointed star you want to use and key a digit for each of the sides (the default is 14 [ie 1 & 4] for 2 player and 135 for 3 player).

Finally you are asked how many humans are playing (default is all computer) and a digit is keyed for the side each person wishes to play followed by the enter key. The screen then switches to graphical display and you are presented with the board.

Due to what is presumably a compromise between size and visibility, two of the star 'points are clipped which is a slight shame. The 'pieces' are rather neatly represented by numbers representing the side they belong to.

The computer moves have a slight delay built-in to improve following the game, but even so, things tend to move quite fast when the computer is playing itself.

Moves by human players are handled cleverly. First, each piece of the player whose turn it is, turns into a letter of the alphabet. This is in inverse text (ie white on black) which makes it easy to see. Once you press the letter of the piece you want to move, each of the possible moves are represented by inverse numbers. Press the number you want and your piece moves.



Your move - pick a letter.....

Pressing enter will terminate a jump early and backspace will enable you to 'backstep' on a jump.

This little game makes good use of the Portfolio, is well written and is a highly recommended addition to your games collection!

Next Issue:

This issue of *The Portfolio Connection* Newsletter is our biggest yet. Even so, we did not have room to bring you the article on printer codes as promised. Look out for this in the next issue.

We'll be taking a look at Don Thomas Jr's excellent address book program for the IBM PC and compatibles along with details of how subscribers to *The Portfolio Connection* Newsletter can register the program at a special discount price!

There will also be a review of the Atari Lynx kit case as a Portfolio carrying case.

Look out as well for the following regular Newsletter items:

- The PBasic Column
- Beginner's Column
- Latest news and Reviews
- New Competition

The next issue of *The Portfolio Connection* Newsletter is due out the first week in April, but for those of you reading the newsletter for the first time, remember:

YOU MUST SUBSCRIBE TO RECEIVE YOUR COPY!

Subscription costs just £7.50 a year - see the enclosed subscription form.

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